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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,656	04/21/2004	Martin G. Hartung	58493US003	4923
32692	7590	06/26/2006	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			GRANT, ROBERT J	
		ART UNIT	PAPER NUMBER	
			2838	

DATE MAILED: 06/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/828,656	HARTUNG ET AL.
	Examiner Robert Grant	Art Unit 2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 21 April 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-31 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 21 April 2004 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>8-9-04</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 6-7, 9-22, and 27-28 rejected under 35 U.S.C. 102(b) as being anticipated by Maeda et al. (US 5,861,729).

As to Claim 1, Maeda discloses a battery-powered handpiece, comprising: a first charging contact connectable to a first contact of a battery (Figure 1, element 8); and means for allowing charging current to flow from said first charging contact into said battery but preventing current flow in the opposite direction (element 14).

As to Claim 2, Maeda discloses the battery-powered handpiece according to claim 1, wherein said means for allowing charging current to flow from said first charging contact into said battery but prevent current flow in the opposite direction, is a diode located between said first charging contact and said first contact of a battery (element 14).

As to Claim 3, Maeda discloses the battery-powered handpiece according to claim 1, further comprising a second charging contact connectable to a second contact of said battery (Element 10).

As to Claim 4, Maeda discloses the battery-powered handpiece according to claim 3, further comprising a sensing contact arranged in the path of potential electrolytic current flow between said first charging contact and said second charging contact (element 16).

As to Claim 6, Maeda discloses a battery-powered handpiece, comprising: a first charging contact connectable to a first contact of a battery (Figure 1, element 8); a second charging contact connectable to a second contact of said battery (element 10); and a sensing contact arranged in the path of potential electrolytic current flow between said first charging contact and said second charging contact (Element 16).

As to Claim 7, Maeda discloses the battery-powered handpiece according to claim 6, further comprising a diode located between said first charging contact and said battery (element 14).

As to Claim 9, Maeda discloses a charger device for a battery-powered handpiece, comprising a detector for detecting the presence or absence of said battery-powered handpiece and a switch for switching on or off the charging voltage dependent on detection of the presence or absence of said handpiece (Column 8, lines 25-32).

As to Claim 10, Maeda discloses the charger device according to claim 9, wherein said switch is selected from the group consisting of mechanical switches, optical switches,

electromechanical switches, electro-optical switches or magnetic switching means
(Column 8, lines 25-32).

As to Claim 11, Maeda discloses The charger device according to claim 9, further comprising a first charging pin and a second charging pin, said switch allowing a charging voltage to be applied to said charging pins in the presence of said handpiece (Figure 1, elements 24 and 26).

As to Claim 12, Maeda discloses the charger device according to claim 11, further comprising a sensing pin arranged in the path of potential electrolytic current flow between said first charging pin and said second charging pin (Element 28).

As to Claim 13, Maeda discloses a charger device for a battery-powered handpiece, comprising: a first charging pin (figure 1, element 24); a second charging pin (element 26); and a sensing pin arranged in the path of potential electrolytic current flow between said first charging pin and said second charging pin (element 28).

As to Claim 14, Maeda discloses the charger device according to claim 13, said sensing pin detecting electrolytic current flow between said first and second charging pins (element 28).

As to Claim 15, Maeda discloses the charger device according to claim 14, further comprising a warning means for giving a warning signal if electrolytic current flow between said first and second charging pins is sensed by said sensing pin (Element 30).

As to Claim 16, Maeda discloses a device comprising a battery-powered handpiece and a charger device for a battery-powered handpiece wherein: a) said battery-powered handpiece comprises a first charging contact connectable to a first contact of a battery, and means for allowing charging current to flow from said first charging contact into said battery, but preventing current flow in the opposite direction (Figure 1, elements 8 and 14); and b) said charger device for a battery-powered handpiece comprises a detector for detecting the presence or absence of said battery-powered handpiece, and a switch for switching off or on the charging voltage dependent on detection of the presence or absence of the handpiece (Column 8, lines 25-32).

As to Claim 17, Maeda discloses the device according to claim 16, wherein said means for allowing charging current to flow from said first charging contact into said battery but prevent current flow in the opposite direction, is a diode located between said first charging contact and said first contact of a battery (element 14).

As to Claim 18, Maeda discloses the device according to claim 16, wherein said battery-powered handpiece comprises a second charging contact connectable to a second

contact of said battery (element 10).

As to Claim 19, Maeda discloses the device according to claim 18, wherein said battery-powered handpiece further comprises a sensing contact arranged in the path of potential electrolytic current flow between said first charging contact and said second charging contact (element 16).

As to Claim 20, Maeda discloses the device according to claim 16, wherein said charger device switch is selected from the group consisting of mechanical switches, optical switches, electromechanical switches, electro-optical switches or magnetic switching means (column 8, lines 25-32).

As to Claim 21, Maeda discloses the device according to claim 16, wherein said charger device further comprises a first charging pin and a second charging pin, and said switch allows a charging voltage to be applied to said charging pins in the presence of said handpiece (Column 8, lines 25-32).

As to Claim 22, Maeda discloses the device according to claim 21, wherein said charger device further comprises a sensing pin arranged in the path of potential electrolytic current flow between said first charging pin and said second charging pin (Element 12).

As to Claim 27, Maeda discloses a device comprising a battery-powered handpiece and

a charger device for a battery-powered handpiece comprising: a) a battery-powered handpiece comprising: a first charging contact connectable to a first contact of a battery; a second charging contact connectable to a second contact of said battery; and a sensing contact arranged in the path of potential electrolytic current flow between said first charging contact and said second charging contact. b) a charger device for a battery-powered handpiece comprising: a first charging pin; a second charging pin; and a sensing pin arranged in the path of potential electrolytic current flow between said first charging pin and said second charging pin.

As to Claim 28, Maeda discloses the device according to claim 27, further comprising a warning means for giving a warning signal if electrolytic current flows between said first and second charging pins is sensed by said sensing pin (Element 30).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda et al. in view of Kennedy (US 5,233,283).

As to Claim 5, Maeda discloses all the limitations of claim 1, but does not expressly discloses a dental cure light. Kennedy discloses a dental cure light (Column 2, line 42-45). It would have been obvious to one having ordinary skill in the art at the time of this invention to Maeda's charging circuit with the ability to distinguish between nickel-hydride and nickel-cadmium battery packs, to charge a battery of Kennedy's dental cure light.

As to Claim 8, Maeda discloses all the limitations of claim 6, but does not expressly discloses a dental cure light. Kennedy discloses a dental cure light (Column 2, line 42-45). It would have been obvious to one having ordinary skill in the art at the time of this invention to Maeda's charging circuit with the ability to distinguish between nickel-hydride and nickel-cadmium battery packs, to charge a battery of Kennedy's dental cure light.

5. Claims 23-26 and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maeda et al. in view of Watabe et al. (US 5,793,186).

As to claims 23 and 29, Maeda discloses the device according to claim 16 and 27, but Maeda does not expressly disclose a magnetic means. Watabe discloses wherein the battery-powered handpiece further comprises a magnetic means, that cooperates with a magnetically activatable switch arranged in the charger device, to initiate a charging

operation once the battery-powered handpiece is electrically connected to said charger device (Column 1, lines 38-42). It would have been obvious to one having ordinary skill in the art at the time of this invention to use a magnetic switch as taught by Watabe with the charger of Maeda, for the benefit of allowing the circuit to only operate when a device with a magnetic means is brought into close proximity.

As to claims 24 and 30, Maeda in view of Watabe disclose all the limitations of claim 23 and 29, and Watabe further discloses wherein said magnetic means is a magnet arranged in proximity to the housing of the handpiece (Column 1, lines 38-42).

As to Claim 25, Maeda in view of Watabe discloses all the limitations of claim 23, and further discloses wherein the magnetic switching means comprises a magnetically activatable switch that is operable in response to a magnetic means arranged in said handpiece (Column 1, lines 38-42).

As to Claim 26 and 31, Maeda in view of Watabe disclose all the limitations of claim 25 and 29, Watabe further discloses wherein said magnetically activatable switch comprises a Reed switch (Column 1, lines 38-42).

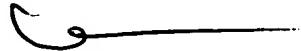
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Grant whose telephone number is 571-272-2727. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RG



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SUPERVISORY PATENT EXAMINER